SEQUENCE LISTING

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      Temple Jr., Davis L.
      Layer, Richard T.
      McCabe, R. Tyler
      Jones, Robert M.
      Cognetix, Inc.

<120> Uses of Kappa-Conotoxin PVIIA

<130> Kappa-PVIIA

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<150> US 60/219,438
<151> 2000-07-20

<150> US 60/155,135
<151> 1999-09-22

<160> 25

<170> PatentIn Ver. 2.0

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<222> (1)..(27)
<223> Xaa at residue 2, 7, 18, 19, 22 and 25 may be Arg,
      homoarginine, ornithine, Lys, N-methyl-Lys,
      N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any
      synthetic basic amino acid, His or halo-His; Xaa at

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<222> (1)..(27)
<223> residue 4 may be Pro or Hyp; Xaa at residue 9 and
      23 may be Phe,Tyr, meta-Tyr, ortho-Tyr, nor-Tyr,
      mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
      O-phospho-Tyr, nitro-Tyr, Trp (D or L), neo-Trp,

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<222> (1)..(27)
<223> halo-Trp (D or L) or any synthetic aromatic amino
      acid; Xaa at residue 11 is His or halo-His

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Cys Xaa Ile Xaa Asn Gln Xaa Cys Xaa Gln Xaa Leu Asp Asp Cys Cys
  1   5   10   15

Ser Xaa Xaa Cys Asn Xaa Xaa Asn Xaa Cys Val
            20   25

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 1               5                   10                  15

Ser Arg Lys Cys Asn Ala Phe Asn Lys Cys Val
             20                  25


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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20                  25
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 1                   5                   10                  15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20                  25
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 1                   5                   10                  15

Ser Arg Lys Cys Asn Arg Phe Asn Ala Cys Val
            20                  25
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1   5   10   15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ser Arg Lys Cys Ala Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ala Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
            20   25

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1   5   10   15

Ser Arg Lys Cys Asn Arg Phe Ala Lys Cys Val
            20   25

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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
              20                  25


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 1               5                   10                  15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
              20                  25


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 1               5                   10                  15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
              20                  25


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<400> 23
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                   20              25
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
               20              25
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  1                5                10               15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
               20              25
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